s18quiz: EXP LOG (QUIZ v201)
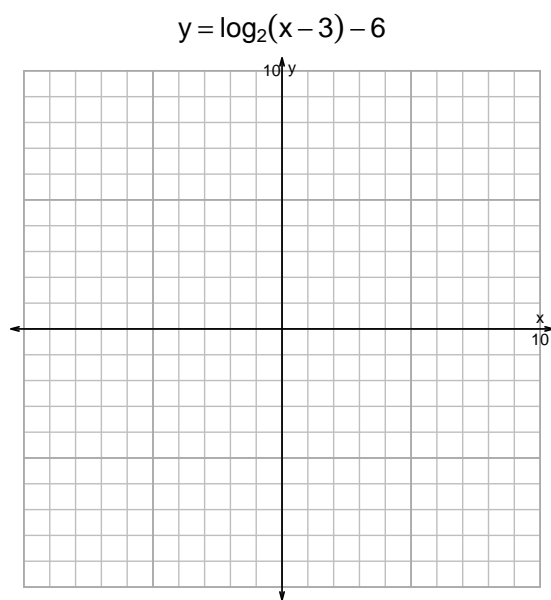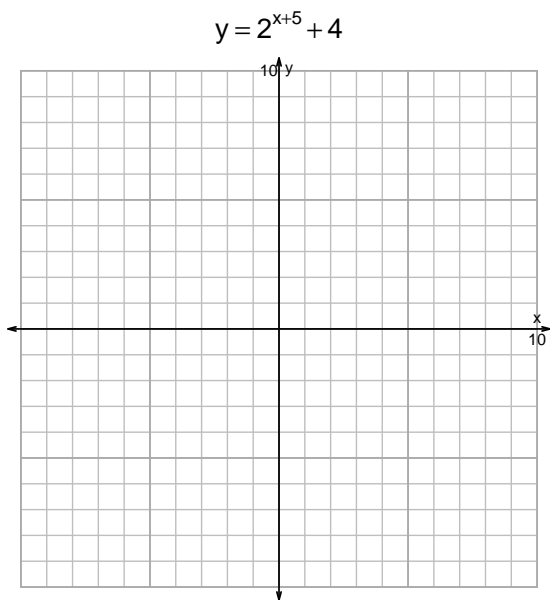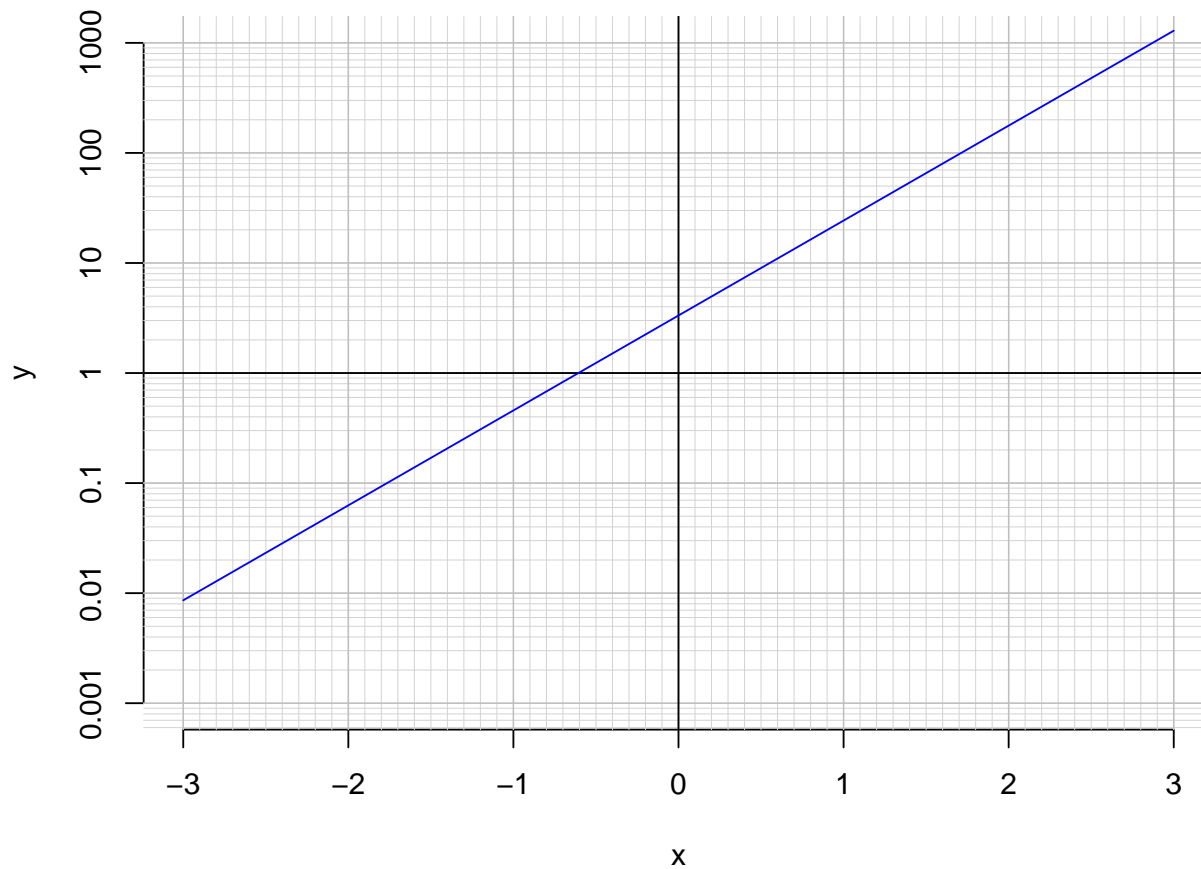
1. Graph $y = 2^{x+5} + 4$ and $y = \log_2(x - 3) - 6$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = 2^{x+5} + 4$$

$$y = \log_2(x - 3) - 6$$

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-11 = \left(\frac{-5}{4} \right) \cdot 2^{7t/3}$$

3. An exponential function $f(x) = 3.33 \cdot e^{1.99x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(1.6)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(9)$.